Remarks

Claims 2-6 and 38-40 are pending in the present application. Claim 5 stands rejected under 35 U.S.C. §112, second paragraph. Claims 2-6 and 38-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sumiaki (JP 63255231). Claims 2-6 and 38-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,055,307 to Tsuru. Claim 38 has been amended. Claims 2,3, 39, and 40 have been cancelled without prejudice. None of the amendments constitute new matter in contravention of 35 U.S.C. §132. Reconsideration is respectfully requested.

Claim 5 stands rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim that which Applicants regard as the invention. Applicants respectfully submit that this rejection is obviated by the amendment to claim 5. Applicants have amended claim 5 substantially as suggested in the Office Action. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 2-6 and 38-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by Sumiaki (JP 63255231). This rejection is respectfully traversed.

The present invention claims a method of embolus therapy comprising the steps of introducing into the vasculature of a subject an embolus generating composition having particles selected to generate emboli at a target site within the subject and detecting the embolus location by a diagnostic imaging technique. The composition

includes solid water insoluble particles 10-20 micrometers in size. The particles consist essentially of either a non-radioactive diagnostically effective compound encapsulated in a non-polymeric particulate matrix selected from the group consisting of insoluble metal oxides, insoluble metal salts, inert metals, glass, ceramic particles and porous particles, vesicles encapsulating a non-radioactive diagnostically effective compound, or a solution thereof. The composition further includes an imageable marker formed from an iodinated contrast agent, an MR active agent, or an ultrasound contrast agent to identify the extent of embolization.

The present invention provides a method of using a composition having a marker and emboli-forming vesicles or solid water-insolubble particles of 10-20 microns in size which are formed from, contain, or are coated with a contrast agent. The independent claim is limited to non-polymeric particulate matrices. The present invention provides the ability to embolize the capillary beds of target tissues thus precluding blood flow through the collateral circulation by using smaller embolic particles than employed by the prior art, whose larger embolic particles still allow for collateral circulation to occur.

Sumiaki discloses a therapeutic agent in combination with embolus-generating particulates. The particulates are disclosed as being 10-1000 microns with specific examples of particulates that are 50-100 microns in size. Sumiaki employed blood vessel contrast and CT to detect the location of the generated embolus.

Applicants respectfully submit that Sumiaki fails to disclose each and every limitation of the claimed invention. While Sumiaki discloses the use of blood vessel contrast and CT to detect the location of the embolus, Sumiaki fails to disclose, teach, or suggest an imageable marker as claimed by the present invention. Furthermore, Applicants respectfully maintain that as Sumiaki is specifically focused on a method of therapeutic agent delivery, Sumiaki is different in nature to the present invention and provides no motivation for a diagnostically effective compound as is presently claimed. Therefore, the present invention is patentably distinguishable thereover. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2-6 and 38-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,055,307 to Tsuru. This rejection is respectfully traversed.

Tsuru discloses a slow-release drug delivery granule in which a porous granule contains a drug. The pore size is selected to effect the drug release rate. Tsuru also discloses that a soluble organic polymeric coating may be applied to the granule to further slow the drug release rate as the polymeric coating must first dissolve.

The present invention, conversely, claims solid water insoluble particles encapsulated by a non-polymeric matrix. Applicants respectfully submit that Tsuru fails to disclose each and every element of the claimed invention as Tsuru fails to disclose a non-polymeric matrix or coating. Moreover, Applicants respectfully submit that Tsuru fails to disclose, teach, or suggest the present invention as Tsuru is directed to a method

of therapeutic delivery of its encapsulated drug rather than to a method of diagnostic detection. As such, Tsuru provides no motivation to modify its teachings to read on the claims of the instant invention. As Tsuru fails to disclose, teach, or suggest the claimed invention, Applicants respectfully submit the instant invention is patentably distinct thereover. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2-6 and 38-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over either Sumiaki or Tsuru in view of Meeh (WO 95/27437). This rejection is respectfully traversed.

Meeh discloses particles which are specifically not designed to aggregate (hence, not designed to form emboli). Applicants refer the Examiner to the discussion in the specification bridging pages 8 and 9 in which the ability to thwart aggregation is fully discussed. Additionally, in each of the worked examples, the particles are provided with a coating to achieve the effect of non-aggregation.

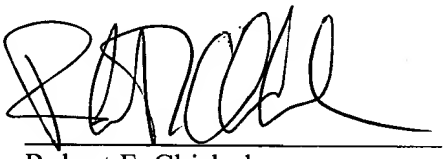
Applicants respectfully submit that Meeh fails to cure the above-identified deficiencies in the Sumiaki and Tsuru disclosures. The Examiner cites Meeh merely for the use of particular hydroxyapatite compositions in the methods of the other cited references. These particular compositions, however, fail to modify either Sumiaki, Tsuru, or both so as to render the present invention obvious. As noted, the disclosure of coatings by Meeh actually teaches away from a chemoembolization technique of the present invention. Therefore, Applicants respectfully submit that as Meeh fails to cure

the deficiencies of Sumiaki and Tsuru, the present invention is patentably distinguishable thereover. Reconsideration and withdrawal of the rejection are respectfully requested.

As none of the cited references disclose, teach, or suggest the claimed invention, Applicants respectfully submit that the instant application, including claims 4-6 and 38, are in condition for allowance. Favorable action thereon is respectfully requested.

Any questions the Examiner has with the foregoing may be directed to Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,



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